

100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

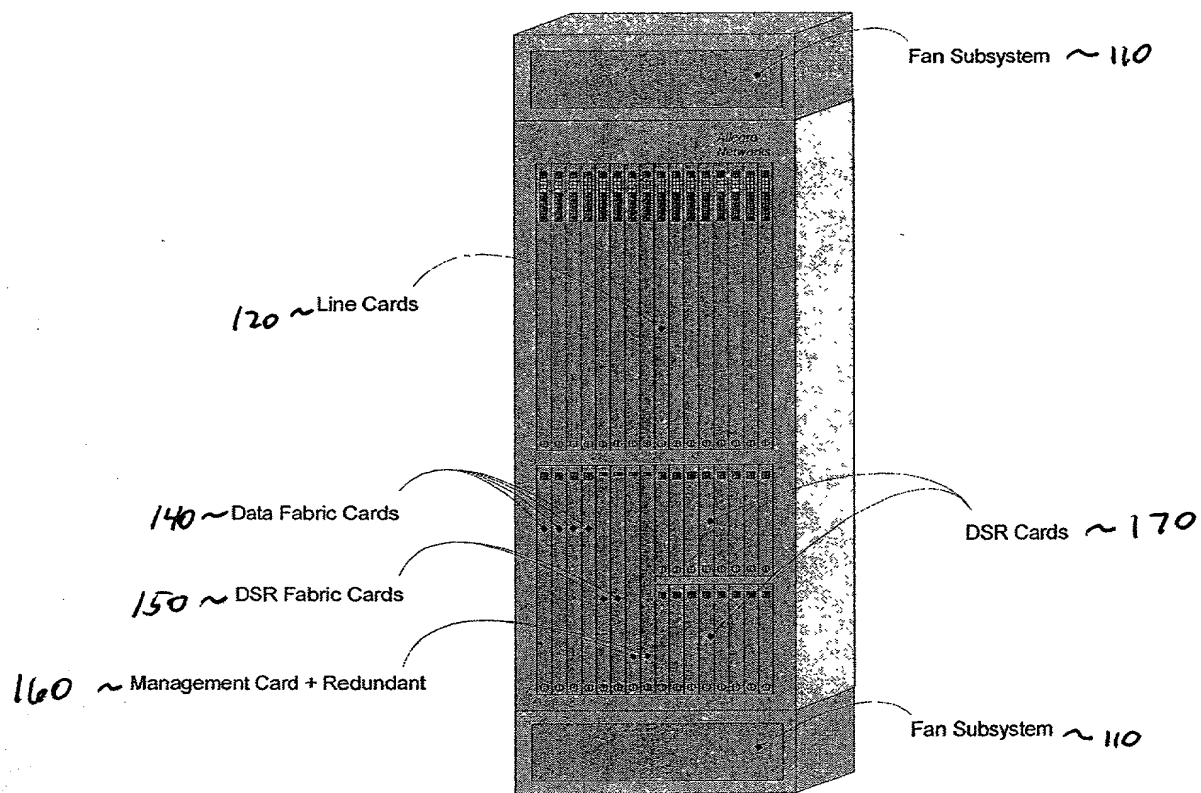
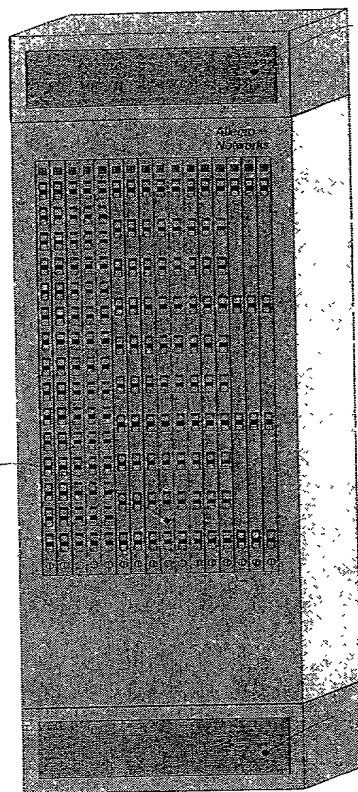


FIG 1A

FIG. 1B is a perspective view of a server rack 100. The server rack 100 includes a fan subsystem 110 at the top, a 48v DC power entry 115 at the bottom, and a front door 130. The front door 130 is open, revealing 16 I/O cards 120. The server rack 100 is a vertical unit with a front door and a rear door. The front door is open, showing the internal components. The rear door is closed. The server rack 100 is a standard 19-inch rack. The fan subsystem 110 is located at the top of the rack. The 48v DC power entry 115 is located at the bottom of the rack. The 16 I/O cards 120 are located in the middle of the rack. The front door 130 is open, revealing the internal components. The rear door is closed. The server rack 100 is a standard 19-inch rack.



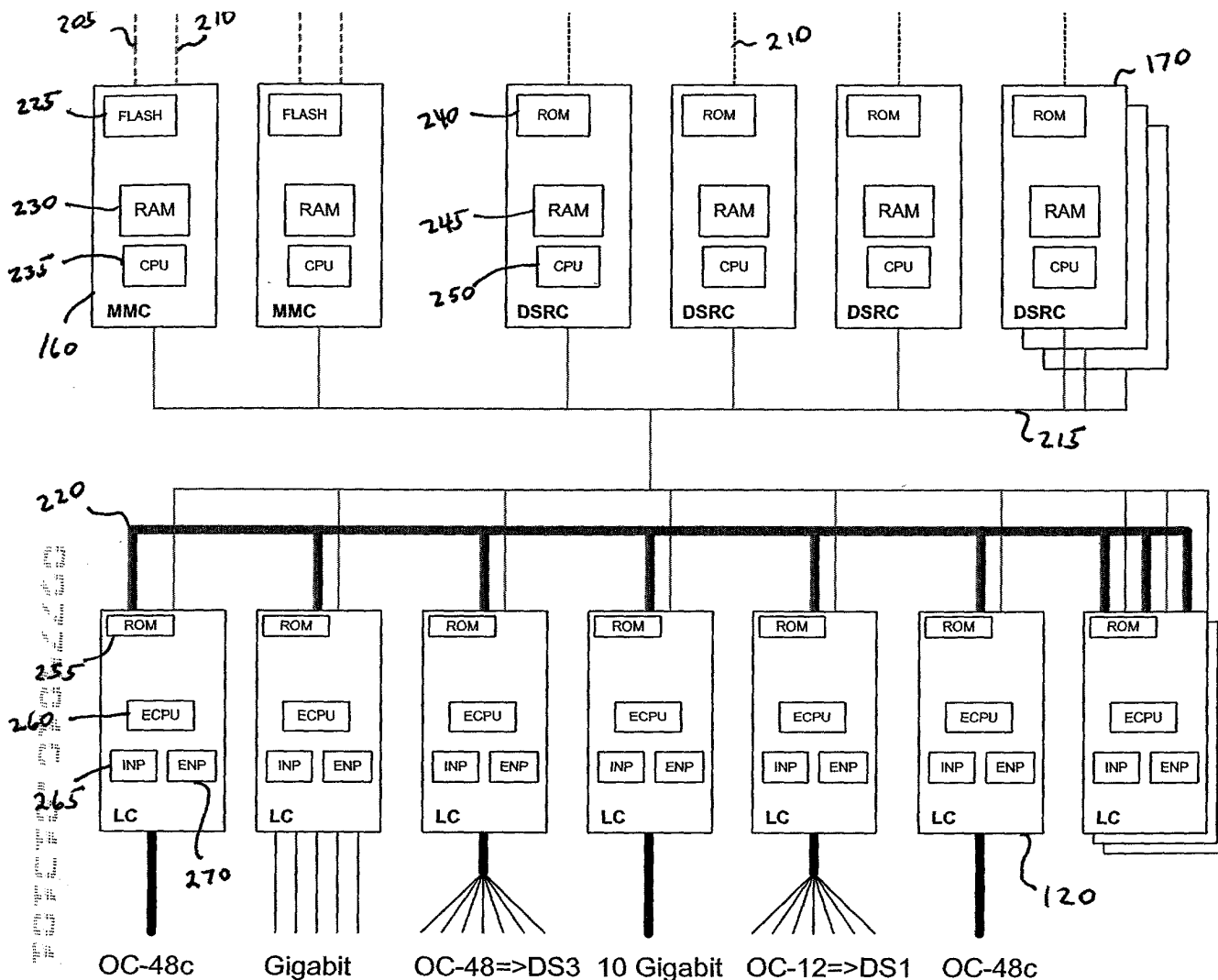
Fan Subsystem ~110

(16) I/O Cards

48v DC Power Entry ~115

100

FIG 1B



MMC - Management Module Card
 DSRC - Distributed Service Router Card
 CPU - the main CPU for DSRC, could be a PowerPC
 LC - Line Card
 FLASH - to hold image and configuration files, serve as Booter as well.
 ROM - BootROM
 ECPU - the Exception Processor, could be the same as the CPU for DSRC
 INP - the Ingress Network Processor for packet processing, including co-processor and custom ASICs
 ENP - the Egress Network Processor

----- the console port
 ----- the 10/100M Ethernet port for out of band management
 ————— the line bus or lower speed fabric connecting between the SPRC and DSRC, and between the Line Cards and DSRC/SPRC. This is mainly for ICM.
 ————— the high speed fabric for the switch traffic

FIG. 2

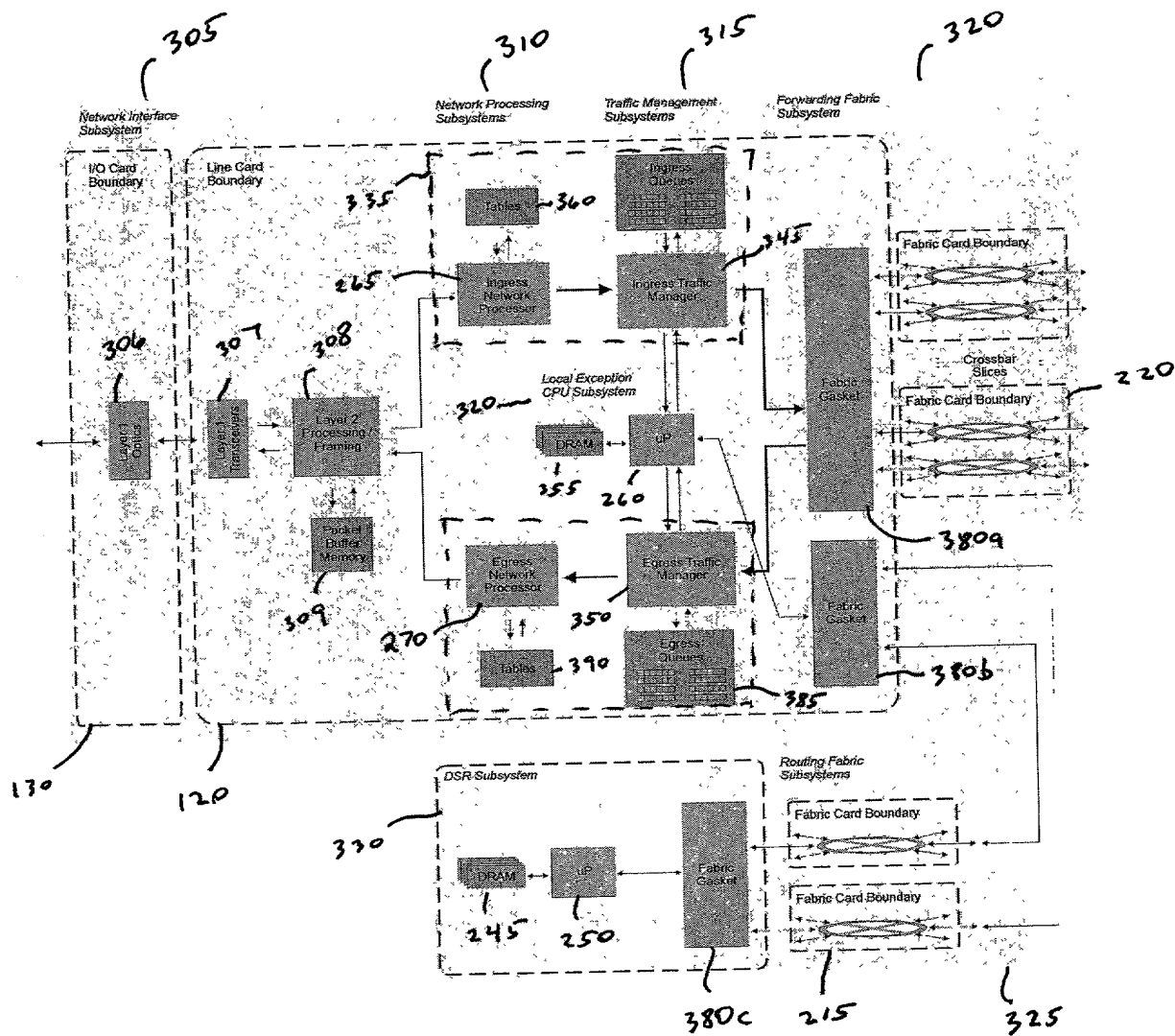


FIG. 3

FIG. 4 is a block diagram of a network architecture showing three main components: MMC (Master Management Component), DSRC (Data Service Router Component), and LC (Line Card). The MMC and DSRC are connected to a central bus 215, which is then connected to the LC. The MMC contains a Chassis Manager 406, a Global Intf Manager 408, a DSR Master 404, an ICM Director 410, an SPR Agent 412, Applications 414, and BGP 413. The DSRC contains a DSR Manager 416, Applications 420, BGP 422, Web/SNMP/CLI Master 424, Config Manager 426, Intf Mgr Remote 428, DSR1 Agent 430, and DSR2 Agent 432. The LC contains an ASIC Manager 434, ICM/traffic Rx Dispatcher / Tx Agent 436, ASIC Initialization 438, FIB Cache Management 440, Interface Management 442, telnet/ftp client 444, Gigabit/SONET Driver 446, and anything else 448.

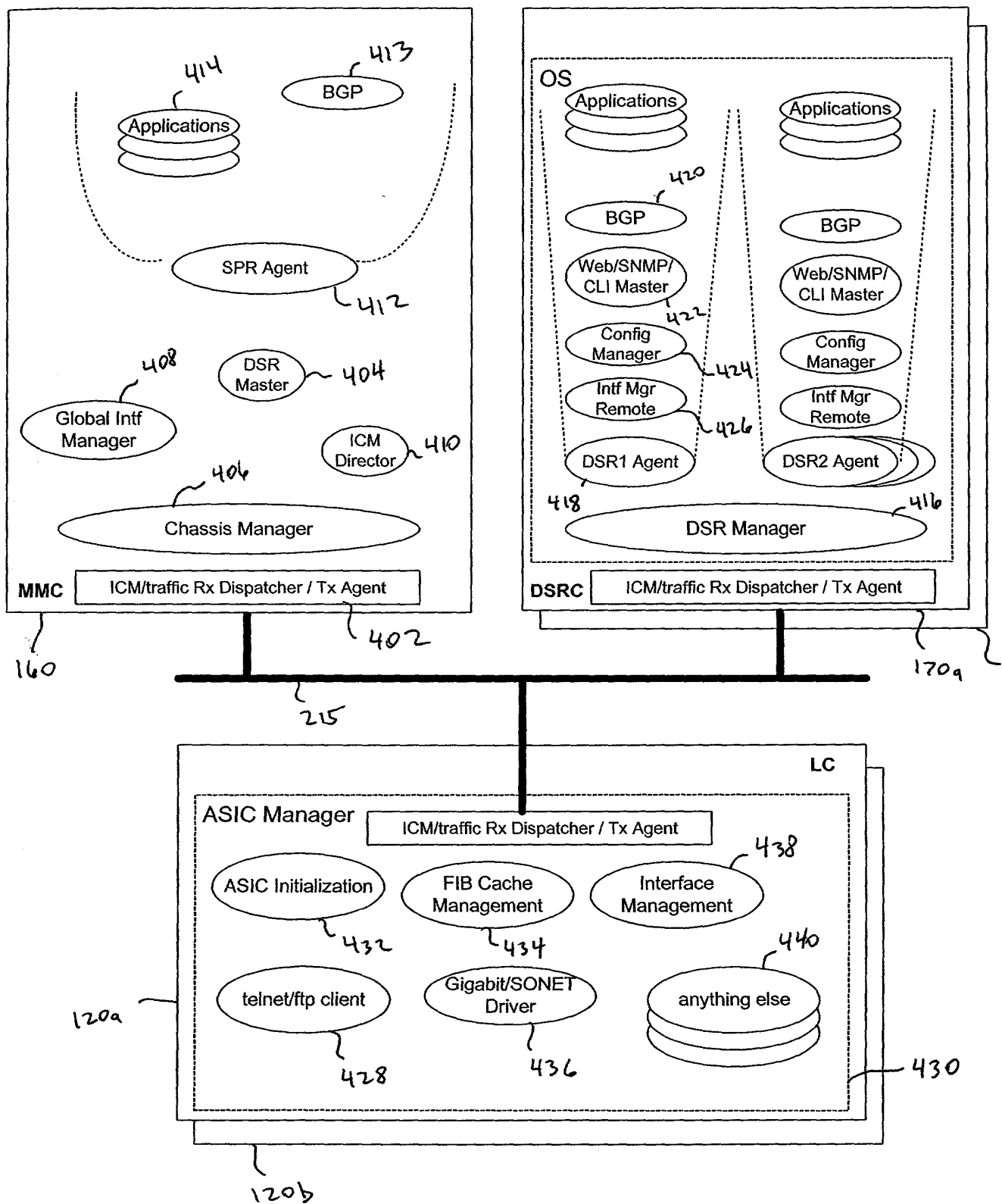


FIG. 4

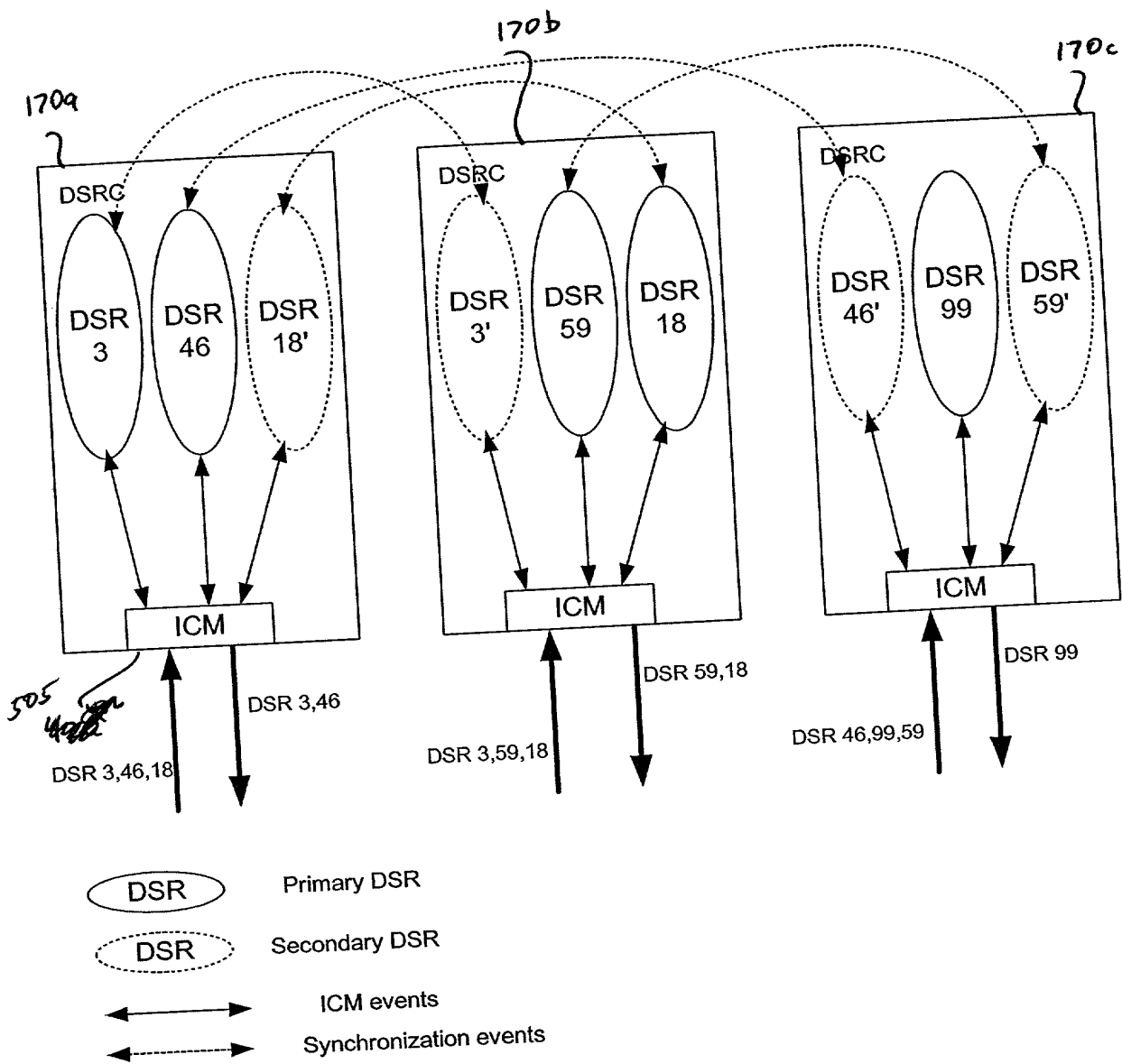


FIG 5